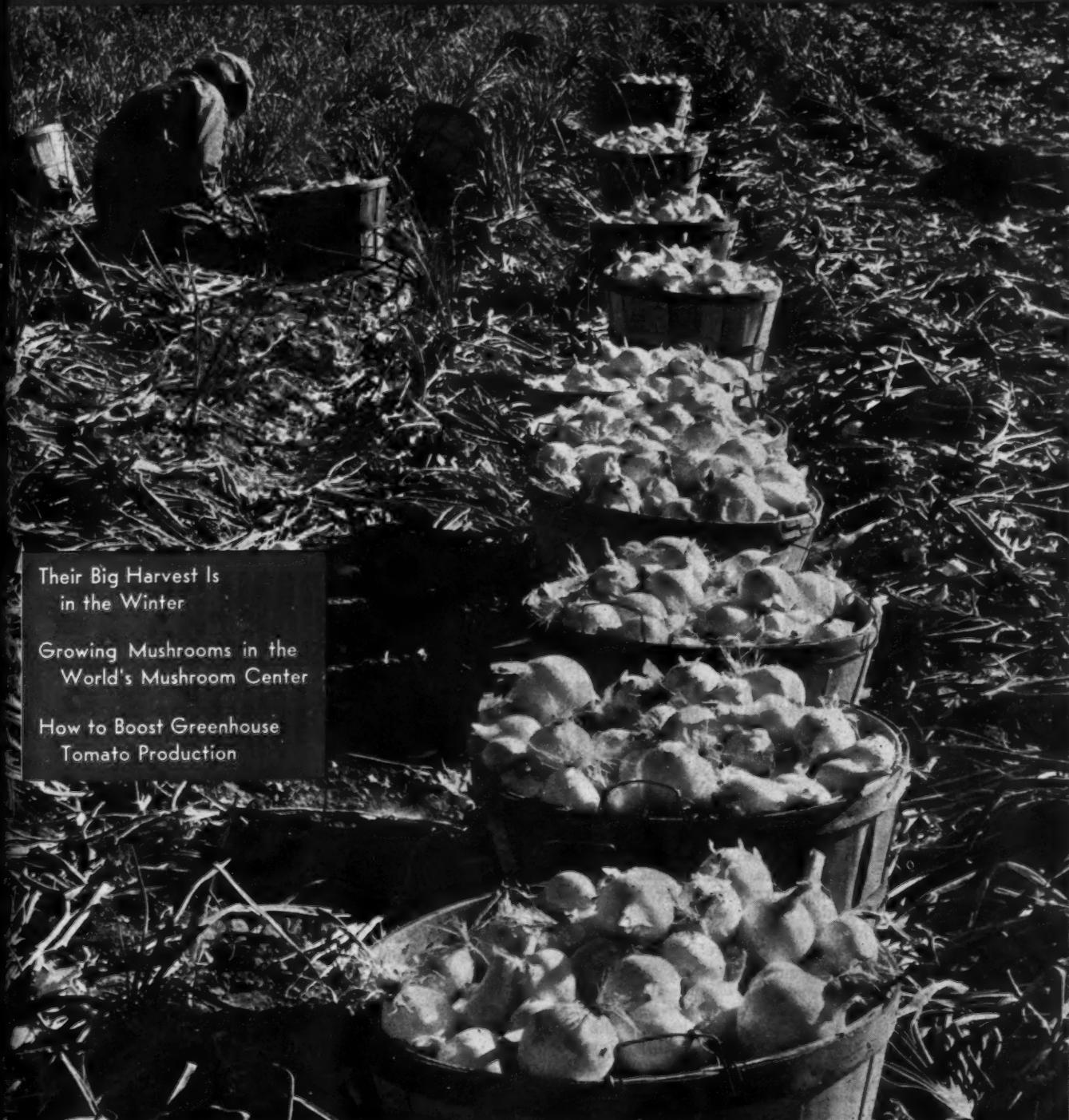


American Vegetable Grower

NOVEMBER • 1957

and MARKET GROWERS JOURNAL



seed
Their Big Harvest Is
in the Winter

Growing Mushrooms in the
World's Mushroom Center

How to Boost Greenhouse
Tomato Production

INC.

INDIANAPOLIS 25
VINELAND, N.J.

VGAA's Advance Convention Program

See page 8



Bob Holub, Firestone Store manager, delivers a "loaner" to Fred and John Ullmann.

"WITH FIRESTONE FREE LOANERS WORK TIME IS NEVER LOST"

say Fred and John Ullmann, Johnstown, Colorado

Firestone's *free loaner* service makes a big hit with Fred and John Ullmann, who rate high among Colorado's leading sugar beet growers. The instant tire trouble develops, a call to their Firestone dealer, Bob Holub of Longmont, Colorado, starts him on the way with Firestone *free loaners* to keep equipment rolling while other tires are being repaired or retreaded.

Here is what the Ullmann brothers say about Firestone service: "For our money, you can't beat Firestone on-the-farm service . . . particularly the *free loaner* service. We never lose a bit of work time because the loaner tires go on the same time others come off the rims, which

keeps equipment on the job. It's that special kind of service that sold us on Firestones."

The Ullmann brothers, like the majority of farmers, have found that Firestone service and quality Firestone tires are their insurance against downtime due to tires. See your Firestone Dealer or Store today. Turn downtime into work time with Firestone *free loaners*.

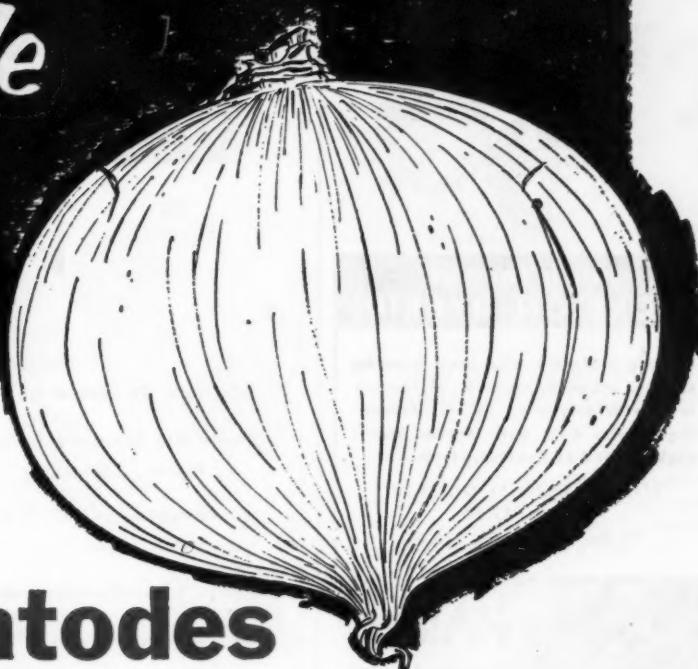
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BETTER RUBBER FROM START TO FINISH

*Enjoy the Voice of Firestone on ABC television every Monday evening.
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vegetable
yields!*



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NEMATODES, tiny worms that take a giant-size bite out of your vegetable profits, can be stopped with D-D soil fumigant. Powerful D-D soil fumigant puts an end to them fast and gives your plants the chance to develop healthy roots . . . for better yields . . . for bigger profits.

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Use of economical D-D soil fumigant, properly applied before you plant, stops nematode damage for the entire season. The initial low cost is returned many times over in bigger yields of better quality vegetables.

Don't gamble with nematodes. Knock 'em out with D-D soil fumigant and give your plants the help they need to become healthy producers. D-D soil fumigant is available under well-known brand names from your pesticide dealer. Don't delay . . . see him today.

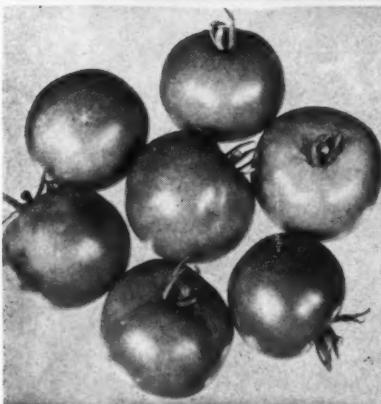
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AGRICULTURAL CHEMICAL SALES DIVISION
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NOVEMBER, 1957

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✓ Early maturity plus long bearing season. ✓ Large, smooth, attractive fruit. ✓ Widely adapted. ✓ Outstanding in the East and Middle West; highly rated in Southern trials.

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1/4 Oz. \$7.50
1/2 Oz. \$13.50; Oz. \$25.00



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American Vegetable Grower

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Commercial Vegetable Grower
Market Growers Journal

VOL. 5 NO. 11

NOVEMBER 1957

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Cover photograph by Bob Taylor

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E. G. K. MEISTER, *Publisher*
RICHARD T. MEISTER, *Editor*

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I. S. BANTA.
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No — you can't grow a magic money tree in Bird Containers — but you can grow extra profits. Bird Containers help you grow healthy, luxurious plants. You command top prices. Bird Containers speed up your labor, save you valuable time. That adds dollars to your income. And Bird Containers are low in initial cost. You can easily afford the entire line. So order now from your distributor — or send coupon for complete information.



NEW BIRD PEAT POTS Have Strength and Nutrition

Special ingredient gives added rigidity — helps prevent breakage. Rugged rim makes handling easier. Nutrient promotes healthy growth. For annuals, bedding plants, vegetable plants — especially when you perform transplanting operation. Two sizes — 2 1/4 and 3 inch.



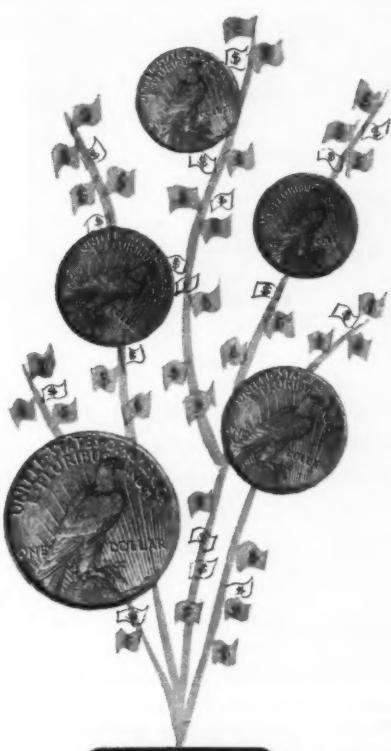
BIRD GRO-TAINER Helps You Sell More Plants

Made from durable fibre, Bird Gro-Tainer Flats help you sell plants in volume. Now in three sizes — 6" x 4" x 2 1/2"; 7" x 5 1/4" x 2 1/2"; 8" x 6" x 2 1/2".



BIRD PERENNIAL POTS Add Months To Your Selling Season

Strong, lightweight, inexpensive, Bird Perennial Pots add 3 to 5 months to your selling season. For all types of perennials, bulbs, shrubs. Four sizes — 5", 5 1/2", 6 1/2", 9" heights.



BIRD VITA-GREEN POTS Contain Roots Up To 12 Weeks

Roots are contained for 10-12 weeks. Pot disintegrates after planting. Nutrient feeds plant. Rugged container simplifies handling of annuals, bedding plants and vegetable plants — especially for resale. Five sizes — 2 1/4", 2 1/2", 3", 3 1/2", 4".



BIRD VITA-BANDS The Nutrient-Treated Plant Bands

Contain roots to transplant stage, avoid transplant shock, get earlier maturity. Bands are nutrient saturated. Vita-Band "10" for annual and vegetable plants; Vita-Band "H" for perennials and long-term crops; Vita-Band "D" especially adapted for mechanical transplanting. Eight sizes.

Bird & Son, Inc., Dept. AVG
East Walpole, Massachusetts

Please send me free literature, including prices and growing instructions, on the following:
(Check items on which you want information.)

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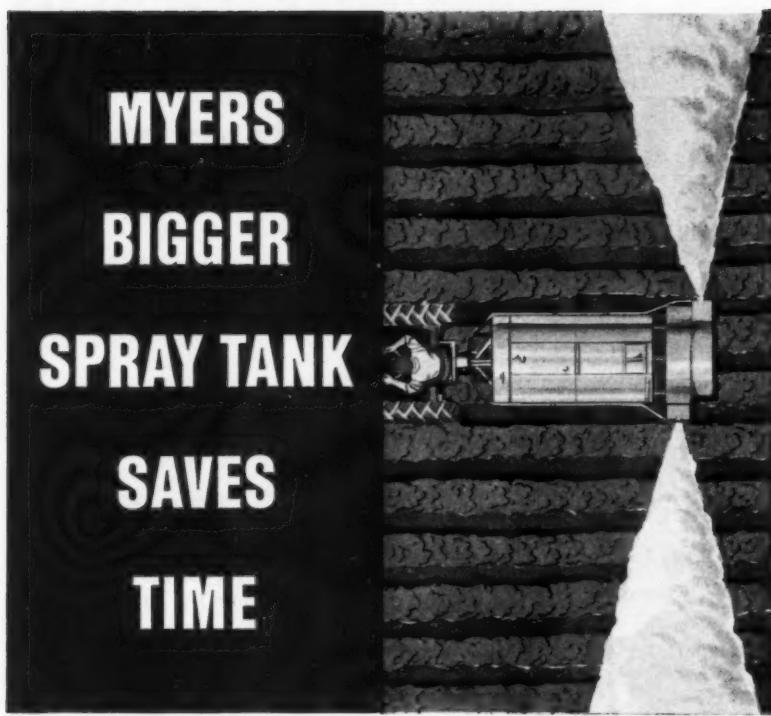
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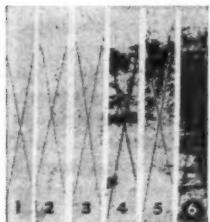
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A new Myers tank coating prevents tank paint peeling and flaking. Test panels 1, 2 and 3 (left) received the new bonded coating; panels 4, 5 and 6 received ordinary treatment. All panels were scratched and immersed in strong solvent usually present in spray mixtures. Results: after several weeks panels 1, 2 and 3 lost no paint; others were stripped nearly bare.



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**Myers® POWER SPRAYERS
AND IRRIGATION PUMPS**

THE F. E. MYERS & BRO. CO.
Ashland, Ohio • Kitchener, Ontario



LETTERS

TO THE EDITOR

Likes Vegetable Areas Series

Dear Editor:

We were interested in the article, "Vegetable Areas of America-South Carolina." We understand you have published on 11 other vegetable growing areas in previous issues and would like to have the back issues covering these articles. We will be pleased to pay you the standard charge for back copies.

Rocky Ford, Colo.

V. E. Hollar
Hollar & Co.

We sent Reader Hollar as many tear sheets of the series as we had, but, except for the more recent articles, our supply is exhausted.—Ed.

Harvesting Dry Land Cress

Dear Editor:

Last year Mr. David R. Kirkham wrote your publication for some information regarding the harvesting of dry land cress, which was a new crop for this area.

This crop was harvested for the first time on the Cumberland Plateau this year with hired seasonal labor.

These are some of the averages determined for the 19 days on which this dry land cress crop was harvested: 43 workers per day, 2442.5 pounds harvested or 2.7 acres per day. Each worker averaged 56 pounds per day.

We certainly thank you for your effort to assist us last year.

Chattanooga, Tenn. A. Elliot Williams

East Tennessee Farm Placement Service

CALENDAR OF COMING MEETINGS AND EXHIBITS

Nov. 14-15—Western Growers Association 32nd annual convention, Hotel del Coronado, Coronado, Calif. Headquarters: 606 So. Hill St., Los Angeles 14, Calif.

Nov. 19-20—Illinois State Vegetable Growers' Association state meeting, Peoria.—Charles H. Benck, Sec'y, Manhattan.

Nov. 19-22—Muck Crop Show, Columbia City, Ind.—N. K. Ellis, Purdue University, West Lafayette, Ind.

Nov. 20—Southern Minnesota Vegetable Growers Association 12th annual meeting, Albert Lea Armory.—Juel B. Nelson, Sec'y, Albert Lea.

Nov. 20-21—Ohio Pesticide Institute annual winter meeting, Neil House, Columbus.—S. D. Wilson, Sec'y, Ohio Pesticide Institute, Ohio Agricultural Experiment Station, Wooster.

Nov. 25-26—Cornell Seed School, Ithaca, N.Y.—P. A. Minges, Dept. of Vegetable Crops, Ithaca.

Dec. 2-4—Potato Association of America annual meeting, Plant Industry Station, USDA, Beltsville, Md.—W. J. Hooker, Sec'y, East Lansing, Mich.

Dec. 5—Second annual Irrigation Exposition, Eastern New Mexico Fairgrounds, Roswell.—A. W. Woodburn, Chaves County Extension Agent, Roswell.

Dec. 8-12—National Junior Vegetable Growers Association 23rd annual meeting, Hotel Abraham Lincoln, Springfield, Ill.—Prof. Grant Snyder, National Chairman, University of Massachusetts, Amherst, Mass.

Dec. 9-12—Vegetable Growers Association of America 49th annual convention, Jung Hotel, New Orleans, La.—Joseph S. Shelly, Sec'y, 528 Mills Bldg., Washington 6, D. C.

Jan. 8—Indiana State Vegetable Growers Association winter meeting, Horticulture Bldg., Purdue University, Lafayette.—J. S. Vandemark, Sec'y, Purdue University, West Lafayette.

Jan. 17-27, 1958—National Potato Chip Week.

Jan. 21-24—New York State Vegetable Growers Association annual convention, Rochester.—W. B. Giddings, Sec'y, Baldwinville.

Jan. 22-27—National Potato Chip Institute 21st annual national conference, Hollywood, Fla.—Harvey F. Noss, Exec. Vice Pres., 946 Hanna Bldg., Cleveland, Ohio.

the article, "Vegetables of South Carolina." It was published on 11 areas in previous issues. We will be glad to have the back issues. We will be glad to charge for

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Hollar & Co.
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Land Cress

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Top market quality starts with proven Northrup King seeds



Beans, beets, cabbage or corn—whatever your market garden crop—you get consistently top results when you plant Northrup King seed. You can count on getting uniform strains—developed and maintained through constant plant selection and testing by Northrup King's own specialists.

Basic stock seed work on many items is done under non-irrigated conditions to obtain adaptability. Seed is produced in the best disease free areas. Outstanding seed vitality, plant vigor and field performance are trade marks of Northrup King seed.

And you're sure to find a variety just right for your growing conditions from Northrup King's extra-wide line—18 kinds of radish, 62 bean varieties, 23 onions, 57 varieties of sweet corn, to name just a few.

Yes, count on *Northrup King for proven seed* to give you top market quality crops.

Ask your Northrup King dealer today about the varieties shown in the picture above: 1 *NK Hollander Cabbage*, 2 *Ruby Queen Beet*, 3 *Scarlet Globe Short Top Radish*, 4 *Morning Sun Hybrid Sweet Corn*, 5 *Sugar King Hybrid Sweet Corn*, 6 *Indian Queen Onion*.

Finer vegetables start with quality seed from **NORTHRUP, KING & CO.** 

Minneapolis 13, Minnesota

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...install Transite underground feeder mains!

With Transite® irrigation pipe, look for substantial savings in planning your system, in installing it and in operating it through the years.

Planning—Because Transite will not rust and remains free flowing, you may use a smaller diameter pipe than otherwise would be required.

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Why Transite is your best protection against costly leakage—the patented Ring-Tite® coupling! Cutaway view shows rubber rings compressed and locked in grooves to provide a lasting, watertight seal. With all its tightness Ring-Tite joints are quickly, easily assembled to save time and expense of installation!

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Johns Manville, Box 14, New York 16, N.Y.
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ADVANCE PROGRAM

49th Annual Meeting
Vegetable Growers
Association of America

in co-operation with

National Association of
Greenhouse Vegetable Growers
December 9-12, 1957

Jung Hotel New Orleans, La.
Joseph S. Shelly, Secretary
528 Mills Bldg., Washington 6, D.C.

SUNDAY EVENING—DECEMBER 8
8:00 Reception—Green Room.

MONDAY MORNING—DECEMBER 9

8:00 VGAA Board of Directors Breakfast followed by Executive Session—Room 3.
8:00 Set up Exhibits—Tulane Room.
9:00 Registration—Lounge—Mezzanine Floor.

MONDAY AFTERNOON—DECEMBER 9

2:00 Call to Order, Paul B. Ruetenik, President, Vermilion, Ohio.
2:10 Welcome—Mayor DeLesepa, S. Morrison. Welcome—Honorable S. J. McCrory, Commissioner of Agriculture. Welcome—Louisiana Sweet Potato Growers, R. J. Castille, Lafayette, La., President. Welcome—Louisiana Farm Bureau, L. L. Lovell, Cherryville, La., President. Response—James D. Swan, Jr., Delevan, Wis.
3:00 "Soil, Water and the Future," The Honorable Allen J. Ellender, Louisiana, Chairman, Senate Agricultural Committee.
4:00 Preliminary Report, Resolutions Committee, H. J. Evans, Chairman.

TUESDAY MORNING—DECEMBER 10

8:00 Creole Breakfast, Charcoal Room
M.C. George Shannon, Radio Station
WWL.
10:00 Visit Trade Show—Tulane Room.

Greenhouse Section

Rooms 4 & 5—Ed Wright, Chairman

TUESDAY AFTERNOON—DECEMBER 10

2:00 "Latest Research in Greenhouse Production," Dr. S. H. Wittwer, Michigan State University.
"Consumer Preference Studies," M. E. Cravens, Ohio State University.
4:00 Business Session, National Association of Greenhouse Vegetable Growers.

White Potato Section

Room No. 2—George Tallman, Chairman

2:00 The Potato Chip Industry—"How It Can Increase Sales of Potatoes"—Dr. Donald W. Newsom, Louisiana State University, Chairman.
Panel—W. D. Dickey, Dickey Potato Chip Company, New Orleans; H. W. Lay, Lay Potato Chip Company, Atlanta, Ga.
2:45 "Possibilities of Pre-Peeling White Potatoes"—John T. Brennan, Brennan Prepared Potato Company, New Orleans, La.; Ralph Lally, Food Processor, New Orleans, La.
3:30 "Seed Improvement in the West and North Its Impact on the Potato Industry"—Dr. T. P. Dykstra, USDA, University Station, Baton Rouge, La.; A. C. Moreau, Agricultural Extension Service, Louisiana State University, Baton Rouge, La.

General Truck Crops Section

Green Room—John Wickham, Chairman

2:00 "Productive Potential of Land Under Optimum Conditions"—Prof. L. M. Ware, Auburn Polytechnic Institute, Auburn, Ala.
2:45 "Vegetable Production Problems"—Dr. F. S. Jamison, University of Florida, Chairman.
"Nematode Problems"—Dr. John P. Hollis, Louisiana State University, Baton Rouge, La.; Mike Giampalva, Assistant Horticulturist, Louisiana State University Fruit and Truck Stations, Hammond, La.
"Chemical Residues"—Dr. Charles S. Petty, Louisiana State University Medical School, New Orleans, La.
"General Production Marketing Problems and Methods"—Dr. H. T. Blackhurst, Texas A & M College, College Station; Dr. H. C. Mohr, Agricultural Extension, Texas A & M College, College Station.
(Continued on page 15)

AMERICAN VEGETABLE GROWER

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Snowball Y Cauliflower—developed by Ferry-Morse breeders for vigorous growth even under adverse conditions. Plants are large and erect, produce solid, pure-white heads with tight, smooth curds. This later maturing cauliflower is unexcelled for uniformity, quality and marketability. Better see your Ferry-Morse dealer today.



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SURE-HEADING SHIPPER

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Detroit, Mich. • Mountain View and Los Angeles, Calif.
Memphis, Tenn. • Harlingen, Texas • Tampa, Fla.





Irrigation of vegetable crops in Lower Rio Grand Valley of Texas is almost entirely by ditch method; portable system rarely used.



Side-dressing tomatoes on Stugard Ranch, San Juan. 200 pounds per acre of 16-32-16 applied with Gustafson fertilizer distributor.



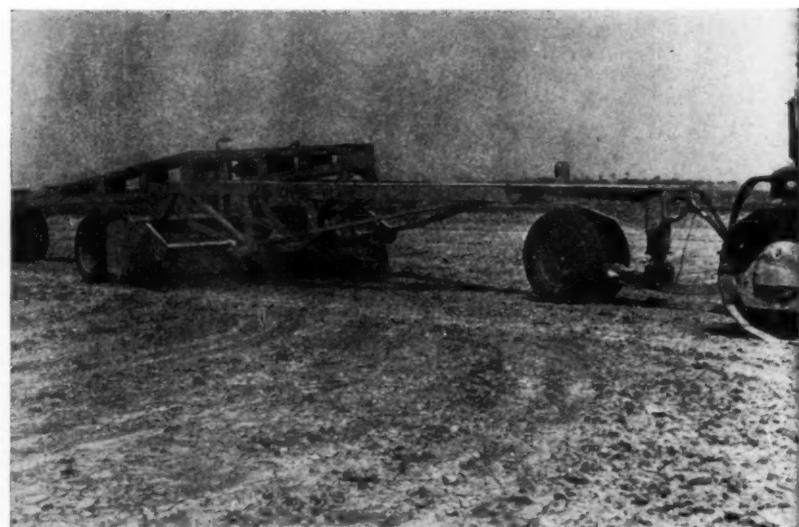
Spraying cantaloupes on Carl Schuster farm, San Juan. Dithane (1 quart per acre) and methylparathion (1/4 pound per acre) applied for control of mildew, insect pests. Takes 55 to 100 gallons of mixture for an acre, depending on size of melon vines.



Dr. George Wene, Texas Experiment Station, Weslaco, shows two onions on left infected with Purple Blotch. The onions on right are healthy.



Most vegetable crops in the valley grow on ridges. Fertilizer, especially phosphoric acid, often put under bed when throwing it up.



A step in preparing land for vegetable production in the valley is proper grading and leveling to facilitate irrigation. This type of equipment is used for this purpose.

Their BIG HARVEST Is in the Winter

Texas growers produce a variety of crops in the Lower Rio Grande Valley, keep winter markets well supplied

By ELDON S. BANTA

HEAVY investment in land, equipment, and labor, plus increasing costs of production, appear to be discouraging small vegetable growers in the lower Rio Grande Valley of Texas.

It is generally considered that a grower with 100 acres or less of vegetables cannot operate profitably in the Valley.

The trend is towards larger farm units, owned and operated by corporations or grower-shipper combinations.

Yet, there remains a significant number of farmer-owned and operated farms. Carl Schuster and his brother, Frank, typify this group.

Each owns and operates his farm near San Juan. Carl grows 18 different kinds of vegetables on 1000 acres of fertile loam and clay loam soil. Frank's farm consists of 600 acres of vegetables.

Carl grows some 400 acres of carrots, the present leading vegetable of

the Valley, with Imperator the foremost variety. Plantings are made periodically, beginning in August and finishing by the first of January, thus giving a continuous market supply during the harvest season which stretches over the winter and spring months.

Most Valley soils are well stocked with potassium, but additions of phosphorus and nitrogen are needed. Carl puts from 60 to 80 pounds of phosphoric acid per acre under the beds before seeding carrots. Nitrogen is supplied at the rate of about 60 pounds per acre by injecting anhydrous ammonia in the irrigation water.

First application of water comes just after seeding to sprout the seed and get seedlings up. This application, depending upon any rainfall, may take as much as 8 acre-inches of water. Two or three additional applications are generally needed to mature the crop. Later rates are less, ranging around $3\frac{1}{2}$ inches each. A general rule is to supply about 3 acre-inches on heavier soils every four weeks, so long as rains do not occur. Soil should be dried out almost to the



White Granex onions from the Dan Logan Farm, Mercedes, Tex. 240 acres are grown each year: half are white and half yellow. Good yields are 300 50-pound sacks per acre.

wilting point the last 30 days of the growing season to help prevent decay of root tips and also to hasten root development.

A major factor in increasing carrot production is use of weed-control chemicals, which has reduced materially cost of production. Carl applies a naphtha-type oil spray when plants are at the second-leaf stage. Weeds

(Continued on page 20)

Carrot field ready for harvest on Schuster farm; planted in twin rows 14 inches apart.



200 pounds
per distributor.

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purpose.

BLE GROWER

No Sunshine FOR THIS CROP

**Mushroom growing is exacting in its requirements,
and strictly a crop for the professional grower**

By V. K. THOMAS

AGRICULTURE is something of a paradox in Chester County, Pennsylvania. Production is measured in pounds per square foot rather than in tons per acre; crops are planted in autumn and harvested in winter and spring; darkness rather than sunlight is desirable, and, to produce a good crop, low temperatures, instead of summer heat, are an absolute necessity. That's because southern Chester County is the world center of mushroom production.

Although the Kennett Square area of Chester County represents the greatest concentration of the industry, mushrooms are being grown elsewhere in Pennsylvania and in many other parts of the United States.

Profitable production of mushrooms requires heavy labor, constant attention to maintenance of favorable conditions, and eternal vigilance against the inroads of insects and disease.

The mushroom, being a fungus, produces spores, not seeds. These, in turn, must be induced to produce a threadlike mass called mycelium or spawn, which, under the proper conditions, develops edible mushrooms.

The early steps are called "spawn making" and are carried on in a laboratory under conditions as sterile as a hospital operating room.

Before getting his spawn supply, the grower must prepare his houses. A standard mushroom house, usually built of concrete blocks, is 60 by 20 feet and contains two tiers of beds with an alley between. Each tier is six beds high, giving a total bed surface of approximately 4000 square feet. Most houses are now built as "doubles", that is, each house is wide enough for four tiers of beds instead of two. Because light is unnecessary for growth, the houses are windowless.

The first step in preparing a mushroom house for a new crop is steaming to eradicate contamination by insects or disease from the previous crop. This is done by filling the house



Photo: Rohm & Haas Reporter

with live steam from a boiler.

A traveler in the mushroom growing area during midsummer sees huge piles of horse manure or hay and corn cobs on concrete wharfs outside the mushroom houses. These are the ingredients on which the mushrooms will be grown. In the early years, horse manure was used almost exclusively for compost. Since World War II, more and more growers are adopting what is known in the industry as "synthetic compost," which is made up of hay, chopped corn cobs and additional chemical ingredients in standard proportions.

Whether manure or "synthetic" is used, the compost must go through a preparative process on the wharf during which it is turned several times, either by hand or mechanical turner, and water added. In this way, it is broken down by the chemical organisms present.

After the compost has been placed on the beds, it must go through a pasteurization period. This is known as the "sweating out" process when the house is tightly closed. The heat generated by the bacterial action in the compost, in combination with the

moisture, boosts the temperature.

A uniform compost temperature of 140° F. is considered sufficient to kill the pests and molds which could injure the mushroom crop. To be certain of attaining this temperature, artificial heat is often added to the compost heat as it approaches its "peak", and the optimum temperature is maintained for 24 hours. The entire pasteurization process requires about a week.

When pasteurization is completed, the house is allowed to cool to about 75° F. before the spawn is planted. Planting is done by broadcasting the inoculated grain or other spawn carrier on the beds and covering with compost. From these spots, the mycelium grows through the compost in whitish-gray threads.

During this "spawn running" period, the temperature must be maintained at not more than 75° F., and beds must not be allowed to dry out.

Three to four weeks are required for the mycelium to grow through the compost. The beds are then ready for "casing." While the mycelium will grow in the compost, it will not develop into the fruiting stage and



From 60 to 80 tons of compost are necessary to fill double house. During composting heat and ammonia are given off. More growers today are adopting "synthetic compost".

& Haas Reporter
air flow.

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ILE GROWER

produce mushrooms until a thin layer of soil has been placed on top of the compost.

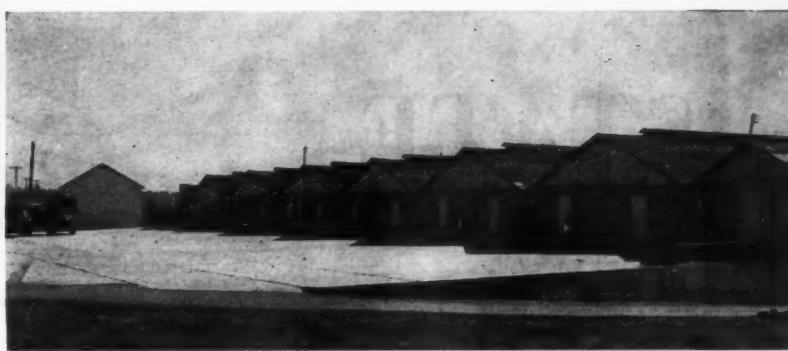
Since the mushrooms derive no nutrient from the soil, the physical characteristics of good casing soil are more important than its chemical composition. It must be of a consistency that will hold water without becoming waterlogged and will not puddle or "cake" on the beds. Growers consider that top soil meets these requirements better than subsoil. This makes it necessary constantly to find new areas from which the top soil can be removed, or to carry on a long-range program of rebuilding the top soil from stripped areas.

The soil's degree of acidity is a matter of importance. Casing soil

should test between 5.5 and 8.0 on the pH scale.

One of the most serious causes of crop failure has been found in recent years to be due to hordes of certain species of nematodes in the casing soil. These are present in all soils, and the most practical means of control thus far has been that of heating the soil to a temperature of 140° F. by means of live steam. The soil as it comes from the field may also contain certain insect pests as well as the organisms which cause mushroom diseases known as "bubbles", *Verticillium* "spot", "truffles", and "mat" disease.

After sterilization has been completed, the soil is stored in a bin or on a concrete wharf and covered with



Above Photo: Pennsylvania State University
Miss Mollie Anne Bourne (left), Wilmington, Ill., is Mushroom Queen for 1957 representing the American Mushroom Institute. The Institute's newly dedicated home is in Kennett Square, Pa. (Above) Concrete composting wharf and mushroom houses.



Photo: Rohm & Haas Reporter
The compost must be turned frequently to assure proper aeration of the entire pile.

canvas or plastic to prevent re-contamination.

When the beds are ready for "casing", about one inch of soil is placed on the surface and leveled off. Again, there must be constant attention to watering, temperature, and ventilation.

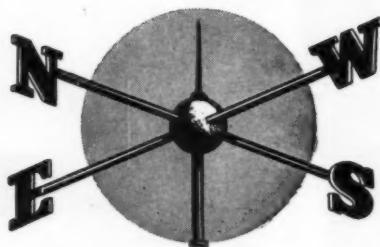
After the mushrooms begin to appear—about three weeks after casing—the temperature must be kept at no more than 70° F. and preferably between 50° and 65° F. The lower temperatures improve mushroom growth and also discourage diseases and insects. Mushroom growers, therefore, greet with apprehension the suddenly warm days of early spring.

Mushrooms appear in somewhat rhythmic cycles called "breaks". The greatest production is obtained from the first two breaks, but beds properly adjusted for moisture and temperature will continue to produce mushrooms for about three months. While average production in 1940 was only a pound per square foot of bed space, yields of two and one-half to three pounds are more common today.

In the Kennett Square area, growers usually grow two crops a year, filling their houses in September for the first crop, and completing the second crop with the advent of warm

(Continued on page 23)

STATE



NEWS

- Thirty states represented at Texas Convention
- No more backaches for Wisconsin snap bean pickers

Big Convention

TEXAS—Tradespeople from 30 states attended the Texas Citrus and Vegetable Growers and Shippers Association convention in Dallas. The large number of out-of-state members of the trade proved interest in the return of the Texas citrus deal and in the state vegetable deal. John Kimbriel, general chairman; Austin Anson, executive manager of the association; Lyman O'Keefe, president, and other officers and directors are credited for the record attendance and fine program.

Scott Toothaker, attorney, McAllen, spoke on the proposed bill for establishing a fruit and vegetable commission. Senator Lyndon Johnson discussed the national scene.

William J. McCormick, Philadelphia, stressed the idea that we should be thankful for the right to compete. Robert L. Berner, president, United Fresh Fruit & Vegetable Association, Chicago, emphasized the importance of the "Fresh for Health" program. Panelists (receivers, distributors, and wholesalers) from different sections of the country agreed that quality produce packed in attractive containers makes for consumer acceptance.

New officers for the Texas association are: George Sherriff (Knapp-Sherriff-Koelle), Donna, president; Tom H. Boyce (Boyce, Boyce, and Bottom), Donna, vice-president; and Wallace Mahoney (Pacific Fruit and Produce Co.), La Feria, secretary-treasurer.

Variety Tests

NEW MEXICO—At the annual Farm Day, New Mexico A&M College, State



THREE BROTHERS WIN AT JUDGING

Shown above are the Cuthbert brothers (left to right): Robert, 14; Ronald, 17; and Wayne, 15, of the Franklin County Vegetable Judging Team. They will represent Ohio in the National Vegetable Judging, Grading, and Identification Contest at Springfield, Ill., in December, during the annual meeting of National Junior Vegetable Growers Association.

Coached by their father, Robert, commercial vegetable grower and 4-H Club leader, this team from Groveport, won the Ohio 4-H Vegetable Judging Contest at the state fair. There they had to judge five different classes of vegetables and identify variety types; grade potatoes according to U.S. Standards, and identify diseases, insects, and weeds. Robert and Ronnie made no errors in identification—a feat unmatched for years.—E. C. Wiltmeyer, Columbus.

College, reports were given on vegetable varieties tested in 1956 and 1957. Top yielders in the 1956 trials were Dixie Lee southern peas; Fordhook #242 lima beans; Texas 107 broccoli; Columbia pole beans; Clemson spineless okra; and Black Valentine and Contender bush beans. In the 1957 trials, Miragreen garden peas and Calumet sweet corn were best. In the field of tomatoes, outstanding varieties were J. Moran, Earlypak, Grandpak, and strains of Pearson. It was proved by the tests that close spacing of tomatoes (6 feet by 1 foot) gave an increased yield of as much as 10 tons per acre over the 6 by 3-foot spacing.

Mechanical Bean Picking

WISCONSIN—About one-third of the snap beans for processing grown in Wisconsin this past season were harvested with mechanical harvesters. Yields of over 5000 pounds per acre were reported from some mechanically picked fields. Within the past few seasons there has been a shift not only

SENATOR SLATED AS VGAA KEYNOTE SPEAKER

Keynote speaker on the opening day of the 49th annual convention of the Vegetable Growers Association of America December 9 will be U.S. Senator Allen J. Ellender, of Louisiana, who is chairman of the Senate Agriculture Committee.

VGAA's four-day program will be held at the Jung Hotel, in New Orleans, La. Reservations may be made by writing to Joseph S. Shelly, secretary, 528 Mills Bldg., Washington 6, D.C.



in the method of harvesting the crop but in type of farm where beans are grown, size of plantings, and production methods.

A few years ago all beans were hand-harvested and produced mainly in relatively small-sized plantings ranging up to a few acres. Now mechanical harvesters move through fields of 50 or more acres. More

(Continued on page 16)



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16)

VGAA PROGRAM

(Continued from page 8)

Processing Crops Section

Room No. 9—Charles Creusiger, Chairman

2:00 Panel on "Breeding, Testing, Introduction and Selecting Vegetable Varieties for Processing"—Dr. Julian Miller, Louisiana State University, Baton Rouge, La., Chairman; Panel—Dr. Lloyd G. Jones, Louisiana State University, Baton Rouge, La.; Charles Singra, Colonial Canners, Independence, La.; Henry Hicks, Associated Seed Growers, Memphis, Tenn.; Ralph T. Brown, Superintendent, Plaquemines Parish Experiment Station, Port Sulfur, La.

3:00 Panel on "Recognizing and Solving Problems Confronting Growers of Vegetables for Processing"—Dr. J. C. Hoffman, USDA, Southeastern Vegetable Breeding Laboratory, Charleston, S.C., Chairman; Panel—P. D. Neilson, President Reuter Seed Co., New Orleans, La.; B. F. Trappey, Trappey & Sons, New Iberia, La.; E. F. Daniel, Princeville Canners, St. Francisville, La.; Dr. Reid M. Grigsby, Agricultural Extension Service, Louisiana State University, Baton Rouge.

General Session

Green Room—James D. Swan, Jr., presiding

WEDNESDAY MORNING—DECEMBER 11

10:00 "Use of Isotopes in Plant Research"—Dr. M. E. Jefferson, Radiological Officer, Agricultural Research, Plant Industry Station, Beltsville, Md.

10:30 "Profitable Packaging in the Produce Field"—West M. Cassidy, American Folding Box Division, Central Fiber Products Co., St. Louis, Mo.

11:15 "Selling the Great American Consumer," Stephen A. Douglas, Director of Trade and Consumer Relations, Kroger Stores Company, Cincinnati, Ohio.

WEDNESDAY AFTERNOON—DECEMBER 11

1:45 "The Success Story of the Louisiana Yams"—Honorable S. J. McCrory, Louisiana Commissioner of Agriculture.

3:00 VGAA Annual Business Meeting.

WEDNESDAY EVENING—DECEMBER 11

7:00 Annual Banquet—Tulane Room
Speaker, Dr. Kenneth MacFarland, Courtesy of General Motors Supplymen's Entertainment—Dancing.

VGAA WOMEN'S AUXILIARY PROGRAM

MONDAY—DECEMBER 9

9:00 a.m. Registration—Lounge 1, Mezzanine.
11:00 a.m. First Business Session—Green Room, Jung Hotel, Mrs. Alfred Glendinning, President, presiding.
2:00 p.m. Attend opening Convention Session—Green Room
Senator Allen J. Ellender, La., Chairman Senate Agriculture Committee, speaker.

TUESDAY—DECEMBER 10

8:00 a.m. Creole Breakfast—Charcoal Room.

WEDNESDAY—DECEMBER 11

8:30 a.m. Breakfast at Brennan's.
9:30 a.m. Walking Tour of French Quarters.
12:30 p.m. Business Meeting Luncheon—Charcoal Room, Jung Hotel.
7:00 p.m. Annual Banquet—Tulane Room, Speaker—Dr. Kenneth MacFarland.

THURSDAY—DECEMBER 12

7:30 a.m. All-Day Tour of Mississippi Delta via Huey P. Long Bridge, Westwego and Algiers Industrial areas.

POST CONVENTION TRIP

Brownsville, Tex. and Mexico City

FRIDAY—DECEMBER 13

4:45 a.m. Leave New Orleans. Arrive Brownsville, Tex., 10:08 a.m.
1:00-5:00 p.m. Tour Vegetable Areas.

SATURDAY—DECEMBER 14

9:00 a.m. Tour Citrus and Vegetable Areas of Rio Grande Valley until 5 p.m.

SUNDAY—DECEMBER 15

7:30 a.m. Leave Brownsville.
10:00 a.m. Arrive Mexico City.

MONDAY—DECEMBER 16

Half-day tour of Mexico City.

TUESDAY—DECEMBER 17

Six-Hour Trip to Pyramids of Teotihuacan, including lunch.

WEDNESDAY—DECEMBER 18

11:00 a.m. Leave for Houston, Tex., and home.

NOVEMBER, 1957

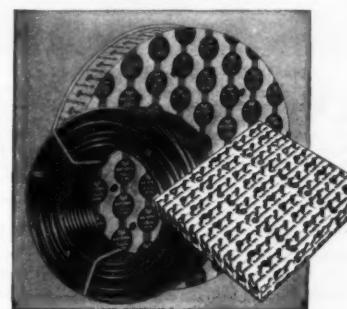
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It's **rugged**—resists cracking and breaking from rough treatment.

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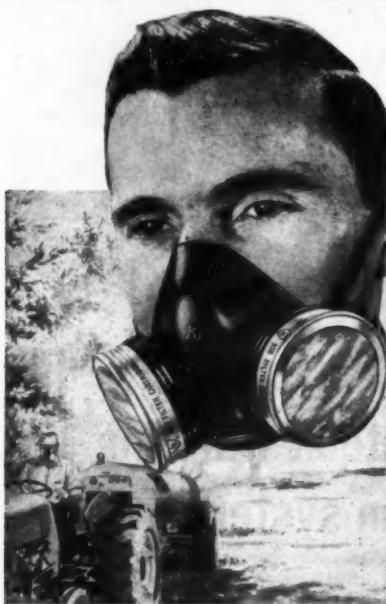
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14

STATE NEWS

(Continued from page 14)

acreage is being contracted with larger-scale vegetable and potato producers, particularly in the central part of the state. Many of these growers are using heavy fertilization rates and irrigation to produce sizable yields of high-quality beans.—John A. Schoenemann, Madison.

Busy Florida Growers

FLORIDA—The fall vegetable season has kept West Palm Beach County growers busy for sometime. Cutting of summer cover crops and readying the land for planting were the main jobs. Assistant County Agent John H. Causey predicted that celery growers would plant a slightly increased acreage and produce an early crop.

Growers throughout the county kept their vegetable lands flooded during the summer to hold down nematodes, weeds, and disease. The favored cover crop was Sesbania.

Good Watermelon Variety

KANSAS—Charleston Gray watermelons did extra well this year.—W. G. Amstein, Sec'y, Manhattan.

More Markets—More Crops

GEORGIA—Fall vegetable markets were being operated this year at both the Farmers Market in Thomasville and the one in Moultrie, according to Hudson Norman, market supervisor for the state department of agriculture. This was the first time the Moultrie market was operated in the fall. Auctions at the two markets were on squash, peas, polebeans, egg plant, bell peppers, sweetpotatoes, and a few other items.

Planting of fall vegetables increased in lower southwest and south Georgia after the Thomasville market was kept open in fall months.

Something new for the southwest section of Georgia was the crop of fall watermelons grown by Bob Jackson, president of



CHAMPION VEGETABLE GROWER

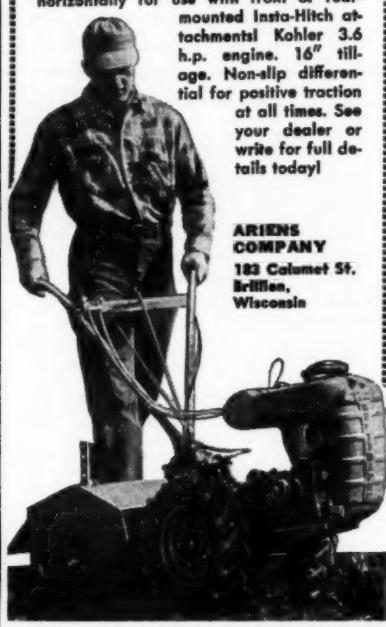
Champion commercial vegetable grower of the 1957 Michigan State Fair, Edward Schweder (left) receives the Ferry-Morse Seed Company merit award from fair vegetable superintendent, William Murphy. Schweder, who operates a 30-acre farm near Utica, displayed over 100 kinds and varieties in his successful bid for top honors.

the Thomas County Farm Bureau. Mr. Jackson had 23 acres of Charleston Grays which he planted in midsummer and sold in September. He received about one cent per pound selling them on Farmers Market, Columbus, and in Florida.

Ebb Cartwright, Atlanta, who is both a grower and a produce wholesaler, grew two crops this year on his well-irrigated, 500-acre Crisp County farm. The first crop was of watermelons, cantaloupes, tomatoes, and green corn—all harvested in early summer. The second included squash, cucumbers, Irish potatoes, and sweetpotatoes.—Mrs. Pauline T. Stephens.

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1/16 oz. \$2.25; 1/4 oz. \$4.00; 1/2 oz. \$7.50; 1/2 oz. \$13.50; 1 oz. \$25.00; 1/4 lb. \$85.00.

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GREENHOUSE CROPS

BOOST YOUR PRODUCTION

Greenhouse tomato growers can obtain 15-20 pounds per plant

THE greenhouse tomato grower should expect, and can obtain, yields of 15-20 pounds per plant or 60-80 tons of marketable tomatoes per acre.

One important aid in obtaining maximum production is the use of hybrids that are early and high yielding, with good fruit quality and resistance to the common diseases, particularly fusarium wilt and leaf mold.

Greenhouse tomato - performance tests are conducted every fall and spring by the Horticulture Department of Purdue University to assist growers in determining varieties or hybrids suitable for forcing.

Test Procedures—Eight varieties and hybrids were included in the spring of 1956. Seed was sown December 9, 1955, and the seedlings transplanted to clay pots December 29. They were set in the ground bed February 7. The first picking was made April 26; the last harvest July 14. All the yields up to and including June 4 were classed as early.

The seed of 10 varieties and hybrids were planted December 6, 1956, for the 1957 test. Seedlings were transplanted to peat pots December 27, and the young plants were set in the permanent bed February 9. There were four replications, two plants per plot. The harvest season started May 2, and ended July 18. Early yields included all marketable tomatoes harvested through June 8.

Results—Results of the tests show that the early and total marketable yields of hybrids were as good as or superior to the highest yielding variety. Tucker's Forcing x Ohio WR3 and Tucker's Forcing x Michigan State Forcing gave the highest marketable yields of the entries tested. In addition, both hybrids are resistant to fusarium wilt and to Race 1 of the leaf mold organism.

Try a small planting of Tucker's Forcing x Ohio WR3 and Tucker's Forcing x Michigan State Forcing and compare them with the variety or hybrid you are now growing. Seeds of these two hybrids may be obtained in commercial quantities for \$6.00 an ounce by writing Dr. Victor Lambeth, Horticulture Department, University of Missouri, Columbia, Mo.—Leslie Hafner, Purdue University.

NOVEMBER, 1957



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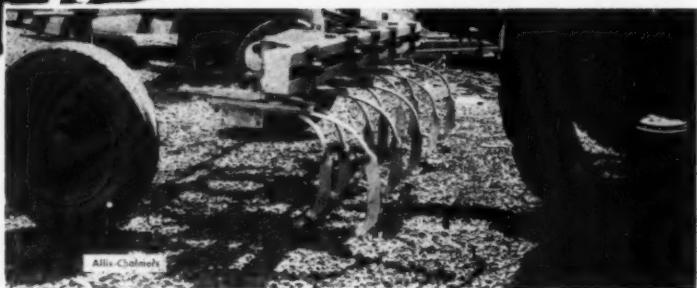
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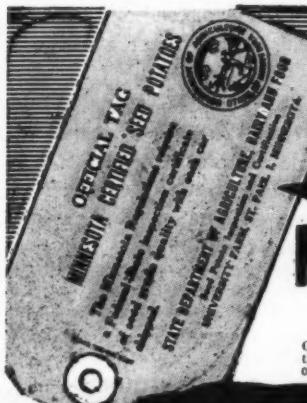
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As It Looks to Me

By JOHN CAREW

RAADIO-ACTIVITY is proving a boon to plant scientists in a strange manner.

Numerous experiment station workers have discovered a sure-fire way of preventing "finger" blight in field plots. Large signs warning of "DANGER—RADIO-ACTIVITY" have been highly effective in repelling strangers and colleagues who might wish to "lift" a few berries, tomatoes, or melons.

Occasionally, the signs do relate to research of a radio-active nature, but their use as a repellent is increasing. It is to be regretted that blackbirds and insects cannot read.

Brown-Checking of Celery

A recent paper in the proceedings of the American Society for Horticultural Science sheds more light on the troublesome brown-checking of celery. California, Florida, New York, and Michigan have been plagued by this boron nutritional disorder characterized by brown cracks on the *insides* of the individual leaf stalks or petioles. This is in contrast to the generally recognized symptoms of boron deficiency, i.e. cracked stem or cracking on the *outdoors* of the petioles.

Yamaguchi, Minges, and Knott in California, demonstrated that brown-checked plants had low boron content, high potassium and that the variety Utah 10-B was highly susceptible.

Their recent paper describes experiments where various combinations of nitrogen and potash fertilizers were used. They concluded that the addition of nitrogen or potash, or both, to soils of low boron content tends to intensify boron deficiency symptoms of celery plants. Brown-checking was more severe in those plots receiving heavy applications of nitrogen and potash fertilizers.

Fertilizer recommendations will vary with soils and regions. Where this disorder has been observed it would appear wise to a) avoid using the variety Utah 10-B; b) add borax at recommended rates; and c) reduce nitrogen and potash applications unless they are accompanied by correspondingly higher rates of boron.

Roadside Stands

You can now drive from Chicago to New York with only eight stops—

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the entrance and exit of each of the four states crossed. Driving this distance without signals, sharp curves, or jaywalkers is a distinct pleasure.

There is one disturbing feature, however. Nowhere along this road can you buy the horticultural produce for which many of these states are noted—tomatoes, peaches, apples, strawberries. The small quantity of fruit available in authorized toll road restaurants is generally poor quality and outlandishly priced.

Limited access highways will increase. A greater proportion of auto traffic will use them. It would seem that locally-grown fruits and vegetables could be made available to travelers without seriously affecting the safe flow of traffic. Canada has grower-operated stands along the Queen Elizabeth highway of Ontario that operate with great success.

Vegetable and fruit growers' organizations have an opportunity to serve members by acting now toward establishment of regulated produce along major highways.

Farm Maps

Have you a farm map? It can be a handy place to record fertilizer applications, soil tests, rotations, and yields. Draw up a rough sketch of your fields and keep it in the packing shed or near your desk. THE END.

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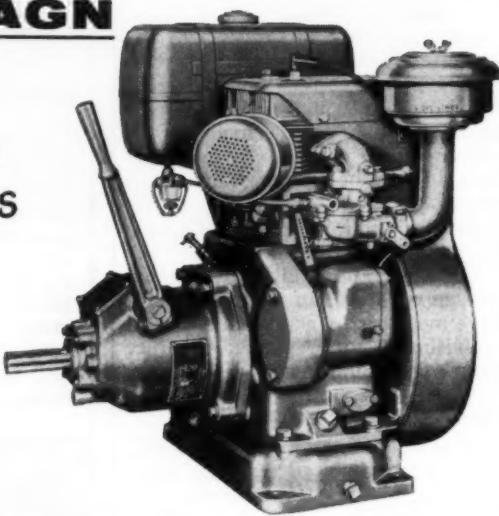
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28

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THEIR BIG HARVEST

(Continued from page 11)

then are small and easily killed. Rates vary from 40 to 80 gallons per acre, depending upon size of weeds.

Frank grows 100 acres of spinach. He prefers the new mildew resistant variety, Early Hybrid 7, a semi-savoy spinach recently developed co-operatively by the Texas Agricultural Experiment Station and the USDA. Yields are good, averaging 7 tons per acre, with some as high as 15 tons per acre. Seedings are made in October in paired rows 12 inches apart on a bed, and beds spaced 40 inches apart. Phosphoric acid at 80 pounds and anhydrous ammonia at 100 pounds per acre are placed under the beds before seeding.

An additional 100 pounds per acre of anhydrous ammonia is applied at the first cultivation, usually in the irrigation water. Leaf hoppers require weekly spray applications of DDT for control. A planting is harvested twice, the first about 65 days after planting. The second is made three or four weeks later.

Carl grows about 200 acres of cabbage, which ranks third in volume of fresh shipments from the Valley. Varieties he prefers are Yellows Resistant Globe, Marion Market, and the old stand-by, though not yellows resistant, Glory of Enkhuizen.

Insect Control Costly

Insect control is a big cost item in cabbage production, up to \$50 per acre. The cabbage looper is especially troublesome. Control is with a dust mixture of Toxaphene, 20% and methyl parathion, 2%, applied at between 25 and 35 pounds of the mixture per acre. First application is made when worms are found on 5% of the plants.

Other vegetables and varieties the Schusters grow include Yolb Wonder and California Wonder peppers; Great Lakes head lettuce; Yellow Granex, White Granex, and Yellow Bermuda onions; Snowball E, X, and Y cauliflower; Long Island Improved Brussels sprouts; Waltham 29 broccoli; Weshaven and Homestead tomatoes; PMR-45 cantaloupes; Palomar cucumbers; endive, and parsley.

Operating 1000 acres of vegetable land in the Valley requires a large investment in tractors, as well as earth leveling, tillage, and harvesting equipment. Carl uses 29 tractors and a wide array of equipment. Irrigation is supplied from the Rio Grande River as well as a dozen wells strategically located.

The Valley grows 31 different vegetable varieties, with 11 being shipped in quantities greater than 100 carlots annually.

THE END.

HARVEST

(page 11)

ly killed. Rates 10 gallons per acre, of weeds. 1 acre of spinach. Mildew resistant 7, a semi-savoy developed co-operative agricultural Experiment Station of the USDA. Averaging 7 tons per acre as 15 tons per acre in October. Spaced 12 inches apart on a 40 inches apart. 30 pounds and 100 pounds at 100 pounds under the beds.

ounds per acre. Fertilizer is applied at 1000 lbs. usually in the form of hoppers re-applications of planting is harrowing, about 65 days after the second is made.

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and varieties the de Yolb Wonder peppers; Yellow lettuce; Yellow wax, and Yellow sweetball E, X, and Island Improveditham 29 broc- Homestead to- taloupes; Palos- ave, and parsley. es of vegetable requires a large as well as earth harvesting equipment, tractors and a tent. Irrigation the Rio Grande in wells strate-

1 different veg- 1 being shipped than 100 carlots

THE END.

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Where can I buy a small portable horseradish grinder?—New Jersey.

Try Enterprise Mfg. Co. of Pa., Third & Dauphin Sts., Philadelphia.

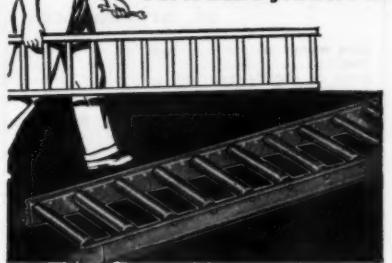
INSECTICIDES IN FERTILIZER

Is there an insecticide I could mix with fertilizer to kill wireworms and flea beetles when applied to my potato plantings?—Ohio.

Any one of four insecticides can be mixed with fertilizer and applied to soil at the time it is being prepared for planting, according to T. H. Parks, Ohio State University entomologist. The mixture can be applied to the surface and immediately cultivated in or drilled in ahead of the planting operation. It should not be left on the surface for long as the insecticides are somewhat volatile and would soon be dissipated. The insecticides used and rates of actual toxicant per acre are as follows: aldrin, 3 pounds; dieldrin, 3 pounds; heptachlor, 3 pounds; chlordane, 6 pounds.

The fertilizer distributor is usually in a position to mix the materials for you, but he must know how many pounds of fertilizer and what formula you wish to apply per acre. Your local dealer is in position to get you this service. Do not try to mix the materials on the farm.

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EASY TO CARRY**
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STANDARD LITEWATE sectional roller conveyors are ideal for "spot" loading and unloading jobs — can be quickly, easily moved wherever desired. They handle all types of commodities up to 80 lbs. and operate at grades as little as $\frac{1}{4}$ in. to $\frac{3}{8}$ in. per ft. Available in 10-ft. and 5-ft. straight sections and 90° and 45° curves; with interchangeable spacing of rollers on $1\frac{1}{2}$ in. through 12 in. centers. Write Dept. S-11, for Bulletin 63-B.

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NOVEMBER, 1957

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Chevrolet Trucks

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isn't packaged prettily, nor is it tied with a gorgeous bow. Our gift just makes it possible for you to stretch that Wonderful Green Stuff so that you get More for Less.

See page 28 of the October issue of AMERICAN VEGETABLE GROWER for details of Our Christmas Gift . . . for You!



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TABLE GROWER

POTATOES

QUACK GRASS CONTROL

GOOD, safe, low-cost control of quack grass in potatoes is possible with the chemical Dalapon (Dow Chemical Co., Midland, Mich.), reports John A. Schoenemann, University of Wisconsin. Tests conducted at the university's Spooner Branch Experiment Station show the following effect of various treatments on total yield of Russet Burbanks:

Treatment	Yield Bu. per acre
Fall plowed only	400
Quack dug, 6 times, fall 1955	420
10 lbs. per acre Dalapon, Oct., 1955	502
5 lbs. per acre Dalapon, May, 1956	660

Excellent quack grass control, says Schoenemann, was obtained during the growing season with the 5-pound spring treatment and good control with the 10-pound fall treatment. In fall-plowed and quack-dug plots, quack grass became troublesome in the rows of potatoes during the growing season.

POTATO FLAKES

POTATO flakes, a new form of dehydrated mashed potatoes, are popular with consumers, according to a study conducted last year in Binghamton, Endicott, and Johnson City, N. Y.

Purpose of the test was to assess the potential market for potato flakes and to ascertain how the product might expand the potato market.

A report from the USDA Agricultural Marketing Service shows that 60% of homemakers who bought potato flakes made repeat purchases, and that nine out of 10 of them would buy the product if it became available on the market.

NO SUNSHINE

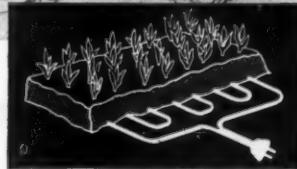
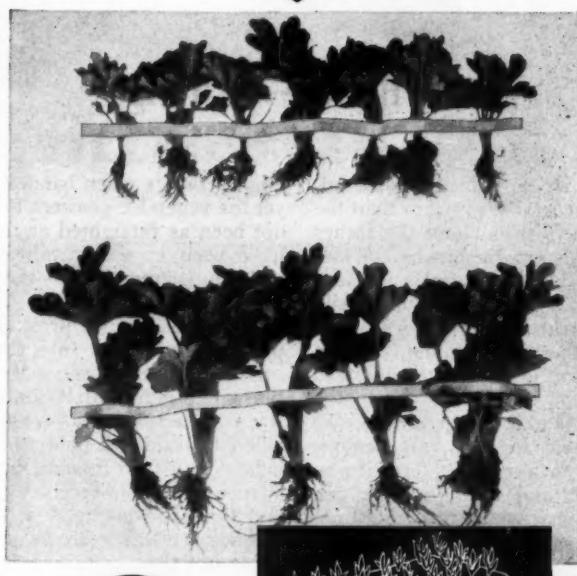
(Continued from page 13)

weather in the spring. Some growers who operate multiple blocks of houses, sometimes as many as 20 or more doubles, have installed air conditioning equipment and are thus able to operate their houses year around.

Because mushroom growing does not require a large acreage, it must not be assumed that the business can be started with little capital. The initial investment for one double house can quickly run to \$10,000 or more. It is a business with many pitfalls and requires considerable "know how" to operate successfully, hence should not be engaged in by the amateur. The successful grower is usually one who has worked for several years for someone else before going into business. THE END.

NOVEMBER, 1957

LOOK AT THESE RESULTS!



HEATING CABLE SETS

Make Seedlings Sprout Faster...
Plants Grow Larger, Stronger!

These two groups of celery plants were set at the same time in adjacent hotbeds. Both are 26 days old. The upper group grew in a manure-heated bed. The second, in soil heated with G-E heating cable sets, sprouted days earlier...grew much larger and more uniform in size!

Now you can stimulate and control seedling growth for earlier transplanting...successfully grow larger, healthier plants for peak markets and more profitable prices. A General Electric thermostat-controlled heating cable set, buried in your hotbed soil, supplies even, growth-producing warmth during crucial germination and early plant stages.

G-E heating cable sets come ready-to-install in 30 and 60 ft. lengths with ends assembled into a compound-filled rubber plug...for 110 volts. Also, 120 ft. sets for 220 volts. Detailed instructions for installation—with or without thermostat controls—are packed with each set.

See your hardware or farm equipment dealer, or write to Wiring Device Department, General Electric Company, Providence 7, Rhode Island.

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The Bundle of Twigs

OLD as it is, no fable is more applicable to vegetable growers than the one in Aesop's tales about the father who called his grown sons before him and, with a bundle of twigs, demonstrated that a single one was easily broken but that the same twigs, when bound together in a bundle, resisted the efforts of even the strongest to break them.

And so it is today. The phrase, "In union there is strength," is demonstrated everywhere in modern life by organizations and societies. Men can do together that which they could not hope to accomplish by individual effort.

The idea of a national organization of vegetable growers was suggested a half century ago by Simon B. Chester, a member of the Cleveland Market Growers Association. At that time there were numerous local organized groups in many parts of the United States, each interested only in its local problems.

Such restricted organized effort made solution of many national problems, vitally affecting growers, impossible. For instance, there was no way of comparing prices of vegetables in leading markets because quotations and prices were fixed on varying standards.

Take quotations for cucumbers. New York markets had quotations for box, barrels, and basket; Chicago markets had quotations for dozen, barrels, and basket; Boston had per box only; Louisville by dozen only; Pittsburgh quoted only by hamper.

Each city had its own peculiar way of quoting and selling. What comparison of prices could a grower make? Although considerable progress has been made, market quotations are still not standardized to the extent they should be.

Out of such problems and others has grown the Vegetable Growers Association of America which celebrates its Fiftieth Anniversary next year. We earnestly hope that all growers, who are not now members, will join the VGAA and will help influence their own local associations to join and add strength to the national organization.

Vegetable growers, like men in other walks of life, can accomplish

mighty things when banded together; yet the vegetable growers to date have not been as farsighted as they should have been in the matter of joining and supporting their national organization.

A bigger, more prosperous, and profitable vegetable industry can be realized through national organization. The immortal Bacon profoundly emphasized this responsibility when he said, "I hold every man a debtor to his profession, from which, as men do seek to receive countenance and profit, so ought they, by way of amends, endeavor to be a help and ornament thereunto."

Roadside Marketing

THIS is the season for selling at the roadside. The clear, crisp days of fall draw motorists out into the country, fresh vegetables and fruits are at their finest, and sales of freshly-picked produce are not hard to make.

But is selling at the roadside worth all the work involved?

Hours are long and hard and the busiest time is generally in the late afternoon and evening or on weekends—normally the time for rest and relaxation.

There are other difficulties. Bad weather can slow or stop sales, and a

VEGETABLE CONVENTION



sale lost is seldom regained. This can mean a surplus of a carefully tended crop which ripened at an inopportune time. Or, as is so often the case, varieties carefully planted at different intervals all ripen at once and fail to supply the volume over a period of time required to keep the stand going.

On the other hand, there are possibilities in roadside marketing which can be worth the trouble involved.

Roadside marketing is getting to be larger and larger business. Some 165 stands in one state last year sold over \$1.25 million, or an average of over \$750 from each market. Roadside selling is getting to be big—so big that the successful roadside seller may soon find that the tail is wagging the dog and that the market business is more important than the farming side.

Another fact in favor of the roadside enterprise is that through regular marketing channels, the vegetable grower gets only 40c of the \$1.00 spent for vegetables, while at his own market, with labor provided mostly by his family, he can get as high as 79c. We hear much about integra-

QUOTE-OF-THE-MONTH

"When the frost is on the punkin, and the fodder's in the shock,
And you hear the kyowck and gobble
of the struttin' turkey cock . . ."
—James Whitcomb Riley

tion in agriculture today, with many arguments for and against. Roadside marketing is integration of the kind we like, with the farmer maintaining ownership-control of production through marketing.

The roadside market depends primarily upon people living within a comparatively short distance. Figures show that nearly 80% of a typical stand's sales come from people in the neighborhood. Thus, if the farm is not located properly, obviously roadside marketing is out of the question.

COMING NEXT MONTH

- Vegetable Areas of America—Coastal Areas of California
- Success Secrets with Greenhouse Crops
- Growing Potatoes on the Gulf
- How Gene Adams Grows Sweetpotatoes
- Hydroponics for Tomatoes

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THE ONLY PROFESSIONAL TILLER WITH ALL THESE OUTSTANDING FEATURES

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